

Laboratory Information Exchange in Health IT Introduction

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Topics

- **Interoperability Definition**
- **Why Do We Need Interoperability**
- **Barriers to Interoperability**
- **Federal Health IT Strategic Plan Goals**
- **Shared Nationwide Interoperability Roadmap**
- **Learning Healthcare system**
- **Common Clinical Data Set**
- **Speakers**
- **References**

Interoperability

The ability of a health system to exchange electronic health information and use electronic health information from other systems without special effort on the part of the user.

Derived from the Institute of Electrical and Electronics Engineers (IEEE) definition of interoperability

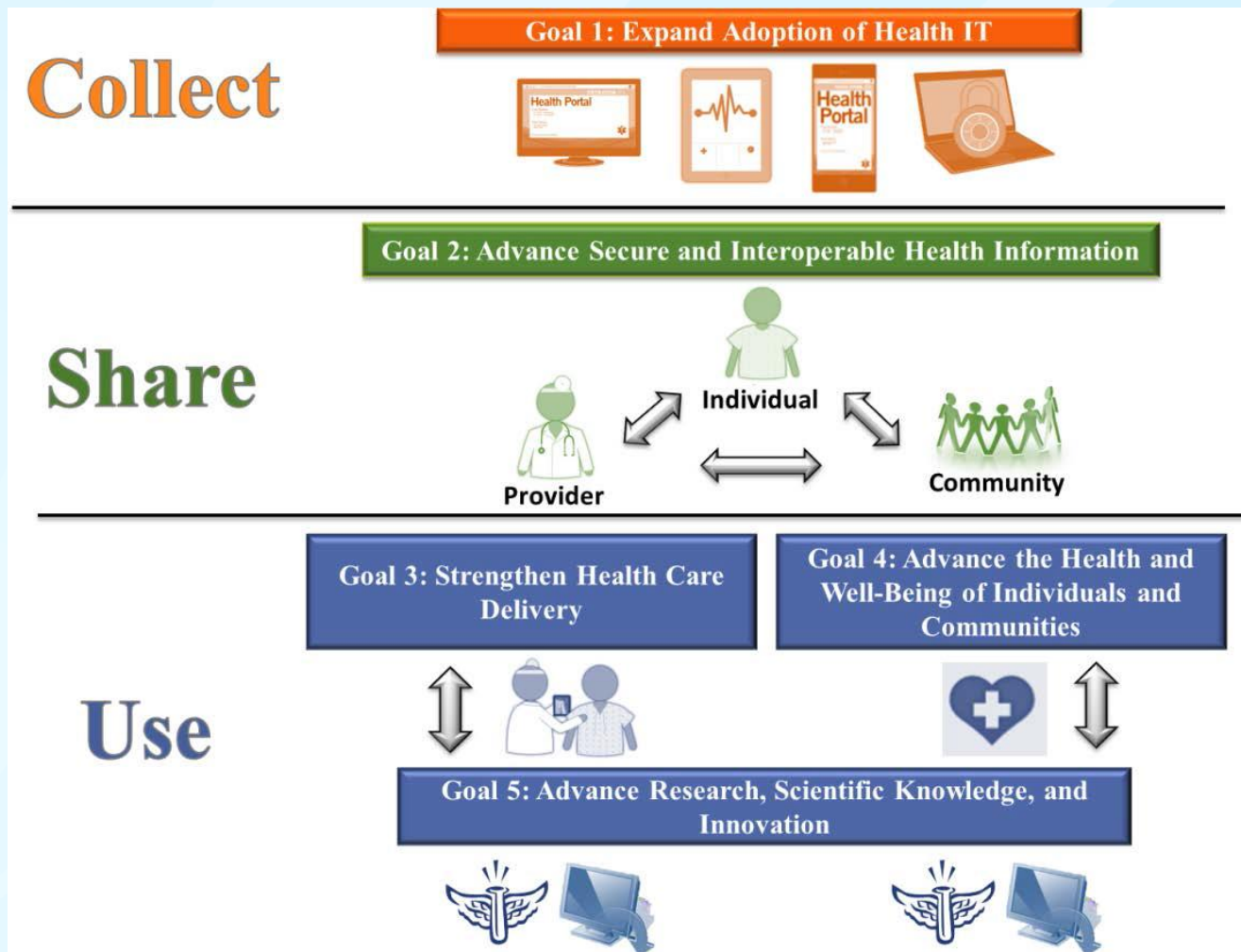
Why Do We Need Interoperability?

- **Patient centered health care, consumers expect their healthcare data to be available when and where it matters to them**
- **Reduce care delivery redundancy and costs**
- **Support analysis that pinpoint waste and identify best practices**
- **Support public health with real-time case reporting, disease surveillance and disaster response**

Barriers to Interoperability

- **Electronic health information is not sufficiently structured or standardized**
- **Lack of financial motives, high costs**
- **Misinterpretation of existing laws and differences in relevant statutes**
- **No reliable and systematic method to establish and scale trust across disparate networks nationwide according to individual preferences**

Federal Health IT Strategic Plan



Shared Nationwide Interoperability Roadmap

The Vision

2015 - 2017

Nationwide ability to
send, receive, find,
use a common
clinical data set

2018 - 2020

Expand interoperable
data, users,
sophistication, scale

2021 - 2024

Broad-scale
learning health
system

Core technical standards and functions

Certification to support adoption and optimization of health IT products & services

Privacy and security protections for health information

Supportive business, clinical, cultural, and regulatory environments

Rules of engagement and governance

Learning Health System

Better care, smarter spending, healthier people

- **Concept introduced 2007 by Institute of Medicine in response “To Err is Human and Crossing the Quality Chasm”**
- **Based on cycles and analytics**
 - generate knowledge
 - feedback of knowledge to stakeholders
 - change behavior to improve health and to transform organizational practice
- **Supports the need for improvement in safety, efficiency, and patient centeredness, based on best available practices**

A Common Clinical Data Set

Patient name	Laboratory test(s)
Sex	Laboratory value(s)/results(s)
Date of Birth	Vital signs
Race	Care Plan fields (goals and instructions)
Ethnicity	Procedures
Preferred language	Care Team Members
Smoking status	Immunizations
Problems	Unique device identifier(s) for a patient's implantable devices
Medications	Notes/Narrative
Medication allergies	

Speakers

- **Karen Dyer (CMS) – Laboratory Interoperability Plan**
- **MariBeth Gagnon (CDC) – Update on *a*LOINC Order Code S&I Framework Initiative**

References

- **FEDERAL HEALTH IT STRATEGIC PLAN
2015 – 2020**
<http://www.healthit.gov/sites/default/files/federal-healthIT-strategic-plan-2014.pdf>
- **Prepared Connecting Health and Care for the
Nation – A Shared Nationwide
Interoperability Roadmap**
<http://www.healthit.gov/sites/default/files/nationwide-interoperability-roadmap-draft-version-1.0.pdf>

Regulations

- 2015 Edition Health Information Technology (Health IT) Certification Criteria, Base Electronic Health Record (EHR) Definition, and ONC Health IT Certification Program Modifications Proposed Rule – March 20, 2015

<https://s3.amazonaws.com/public-inspection.federalregister.gov/2015-06612.pdf>

- Electronic Health Record Incentive Program-Stage 3 Proposed Rule – March 20, 2015

<https://s3.amazonaws.com/public-inspection.federalregister.gov/2015-06685.pdf>



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